



Comments—NBP Public Notice # 22

Re: GN Docket Nos. 09-47, 09-51, and 09-137

December 8, 2009

The Honorable Julius Genachowski
Office of the Chairman
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

Dear Chairman Genachowski:

As a community of technologists in the field of optoelectronics, we are writing to express our concern that discussion of the National Broadband Plan (“NBP”) has not included an emphasis on the need to increase the overall performance of our nation’s broadband network. Indeed, the gap analysis presented to the Commission at its Open Meeting on November 18, made no mention of the “performance gap.” This gap is reflected by the fact that the United States is currently 18th in the world in terms of broadband performance.

We share your concern about the unserved and believe that the immediate goal of the NBP should be to ensure that all Americans have access to broadband capability, but we should not limit the plan to ensuring universal broadband access. The plan must also embrace an aggressive effort to vastly improve the performance of the broadband network that currently serves over 60% of the nation.

To achieve this, we believe the plan must include a bifurcated definition of broadband, one definition for “current generation broadband” access that currently serves most of the country and another definition for “next generation broadband” access that most Americans should have access to by 2015. Policy initiatives can then be focused on achieving deployment goals for each service platform.

Current generation broadband might be defined as the median speeds that most Americans can currently access. These speeds should be defined as those that are actually delivered, not just advertised. The Commission staff reports that the advertised median downstream speed for the nation is 6 Mbps and the actual speed is 3 Mbps. The policy goal should be to ensure that current generation broadband is universally available within three years.



Next generation broadband must reflect a stretch goal and must accommodate applications that have not yet been developed. It is generally recognized in the technology community that television-quality programming will converge onto the Internet. So, we must look to television video to determine what network performance will be required to accommodate future video-based applications on the Internet. High bandwidth television programming in 3D and in advanced HD format are currently emerging. This programming requires speeds in excess of 25 Mbps downstream. Similarly, the upstream capacity should also be at least 25 Mbps to enable the user to generate advanced video content as well as receive it. High QoS is also required. Thus, a realistic definition of next generation broadband should include actual downstream speed of at least 25 Mbps, actual upstream speed of at least 25 Mbps, and high QoS.

The goal for next generation access should be to pass 80% of the households by 2015. Indeed, this is a stretch goal. But, such a goal is necessary to drive commercial R&D in network technology and in applications. On the other hand, if the plan only embraces current generation broadband capability, it will discourage technological development.

We appreciate the opportunity to present our views to you for consideration as you finalize the plan.

Sincerely,

Michael Lebby, President and CEO and the Board of Directors,
Optoelectronics Industry Development Association (OIDA)